



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,716	10/04/2000	Michael W. Bychowsky	CM04412H	6435
22917	7590 07/16/2004		EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD			RYMAN, DANIEL J	
			ART UNIT	PAPER NUMBER
SCHAUMBURG, IL 60196			2665	2
			DATE MAILED: 07/16/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)				
	09 <i>/</i> 678,716	BYCHOWSKY ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Daniel J. Ryman	2665				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 04 Oc	<u>ctober 2000</u> .					
a) This action is FINAL . 2b) ⊠ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) <u>1-37</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-4,8-14,16-22,25-27,29,30 and 33-33</u> 7) ⊠ Claim(s) <u>5-7,15,19,23,24,28,31,32, and 36</u> is/a 8) □ Claim(s) are subject to restriction and/or	vn from consideration. Z is/are rejected. re objected to.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 04 October 2000 is/are: Applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examine 11.	a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 2665

DETAILED ACTION

Specification

- 1. The abstract of the disclosure is objected to because it exceeds 150 words in length.

 Correction is required. See MPEP § 608.01(b).
- 2. The disclosure is objected to because of the following informalities: on page 2, line 26 "which my include" should be "which may include" and on page 7, line 15 "The infrastructure components" should all be included on one line which starts the subsequent paragraph.

Appropriate correction is required.

Claim Objections

- 3. Claim 19 objected to because of the following informalities: in line 10 "time-delay indication and the time-delay indication" should be "time-delay indication, the time-delay indication". Appropriate correction is required.
- 4. Claim 36 objected to because of the following informalities: in the last line of the claim "period of time," should be "period of time.". Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-4, 8-11, 25, 27, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Kim (USPN 6,215,791).

Art Unit: 2665

7. Regarding claim 1, Applicant teaches, as prior art, in a time division multiple access wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16page 4, line 12), a method for the router to assist in improving signal quality of information transmitted by the base transceiver as perceived by a user of a wireless communication device, the method comprising the steps of: receiving at least one information packet from the transcoder (page 1, line 16-page 4, line 12); and communicating the at least one information packet to the base transceiver site (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art that the at least one information packet is communicated to the base transceiver site in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the at least one information packet; however, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, communicating a packet in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization between two other devices (delay time) in order to ensure that the packet is received in a specified amount of time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to communicate the at

Art Unit: 2665

least one information packet to the base transceiver site in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the at least one information packet in order to ensure that the packet is received by the base transceiver site within a particular time.

Regarding claim 2, referring to claim 1, Applicant's admitted prior art in view of Kim 8. discloses that the at least one information packet forms part of a first communication and wherein the step of communicating comprises the steps of: determining a priority of a first information packet of the at least one information packet (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22); when the priority indicates that the transcoder transmission time is substantially in synchronization with the base transceiver site transmission time, communicating the first information packet to the base transceiver site (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22); and when the priority indicates that the transcoder and the base transceiver site are presently synchronizing the transcoder transmission time and the base transceiver site transmission time, storing the first information packet for a period of time to enable at least one higher priority information packet of a second communication to be communicated from the transcoder to the base transceiver site (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22) where a low end-to-end delay bound would indicate synchronization since this results in the packet being transmitted just in time to the BTS wherein a low end-to-end delay results in a packet being transmitted before a packet with a longer end-to-end delay.

Art Unit: 2665

- 9. Regarding claim 3, referring to claim 2, Applicant's admitted prior art in view of Kim suggests that when the priority indicates that the transcoder and the base transceiver site are presently synchronizing the transcoder transmission time and the base transceiver site transmission time, the method further comprising the steps of: inserting a time-delay indication into a portion of the first information packet, the time-delay indication corresponding to the period of time that the first information packet was stored in the router (eligible time) (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50); and communicating the first information packet including the time-delay indication to the base transceiver site (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50), wherein the time-delay indication is used by the base transceiver site to synchronize transcoder transmission time to base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50) where the delay times are used to synchronize the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12).
- 10. Regarding claim 4, referring to claim 3, Applicant's admitted prior art in view of Kim suggests that the time-delay indication comprises the period of time that the first information packet was stored in the router (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50).
- Regarding claim 8, referring to claim 2, Applicant's admitted prior art in view of Kim discloses that the step of determining a priority of the first information packet comprises the step of evaluating a portion of the first information packet that includes an indication of the priority (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22).

Page 6

Application/Control Number: 09/678,716

Art Unit: 2665

Regarding claim 9, referring to claim 1, Applicant's admitted prior art in view of Kim 12. discloses that the at least one information packet includes a first information packet that forms part of a first communication and a second information packet that forms part of a second communication and wherein the step of communicating comprises the steps of: determining a priority and a time of arrival of the first information packet (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22); determining a priority and a time of arrival of the second information packet (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22); when both the priority of the first information packet and the priority of the second information packet respectively indicate that transcoder transmission time is substantially in synchronization with base transceiver site transmission time, communicating the first information packet to the base transceiver site when the time of arrival of the first information packet precedes the time of arrival of the second information packet (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22); and communicating the second information packet to the base transceiver site when the time of arrival of the second information packet precedes the time of arrival of the first information packet (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22) where a low end-to-end delay bound would indicate synchronization since this results in the packet being transmitted just in time to the BTS wherein a low end-to-end delay bound results in a packet being transmitted before a packet with a higher end-to-end delay bound.

13. Regarding claim 10, referring to claim 1, Applicant's admitted prior art in view of Kim discloses that the information packet comprises at least one of an audio information packet and a

Art Unit: 2665

video information packet (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22).

Regarding claim 11, Applicant teaches, as prior art, in a time division multiple access 14. wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16page 4, line 12), a method for the transcoder to assist in improving signal quality of information transmitted by the base transceiver site as perceived by a user of a wireless communication device, the method comprising the steps of: communicating the information packet to the router (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art determining a priority of all information packet based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the information packet; including an indication of the priority in a portion of the information packet; and communicating the information packet to the router, whereby the indication of priority is used by the router to prioritize communication of information packets to the base transceiver site; however, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, communicating a packet in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization between two other devices (delay time) in order to ensure

Art Unit: 2665

that the packet is received in a specified amount of time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to determine a priority of all information packet based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the information packet; to include an indication of the priority in a portion of the information packet; and to communicate the information packet to the router, whereby the indication of priority is used by the router to prioritize communication of information packets to the base transceiver site in order to ensure that the packet is received by the base transceiver site within a particular time.

Regarding claim 25, Applicant teaches, as prior art, in a time division multiple access wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16-page 4, line 12), a method for the router to assist in improving signal quality of information transmitted by the base transceiver site as perceived by a user of a wireless communication device, the method comprising the steps of: receiving an information packet from the transcoder (page 1, line 16-page 4, line 12); storing the information packet for a period of time (page 1, line 16-page 4, line 12); and communicating the information packet to the base transceiver site (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art inserting a time-delay indication into a portion of the information packet, the time delay indication corresponding to the period of time that the information packet was stored in the router; and

Art Unit: 2665

communicating the information packet including the time-delay indication to the base transceiver site, wherein the time-delay indication is used by the base transceiver site to synchronize transcoder transmission time to base transceiver site transmission time. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, inserting a time-delay indication into a portion of the information packet (col. 5, lines 26-50 and col. 6, lines 15-22), the time delay indication corresponding to the period of time that the information packet was stored (col. 5, lines 26-50 and col. 6, lines 15-22); and communicating the information packet including the time-delay indication in order to ensure that the packet is received by the base transceiver site within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to insert a time-delay indication into a portion of the information packet, the time delay indication corresponding to the period of time that the information packet was stored; and to communicate the information packet including the time-delay indication in order to ensure that the packet is received by the base transceiver site within a particular time. Applicant's admitted prior art in view of Kim suggests that the time-delay indication is used by the base transceiver site to synchronize transcoder transmission time to base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12) where the delay times are used to synchronize the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12).

Art Unit: 2665

Regarding claim 27, referring to claim 25, Applicant's admitted prior art in view of Kim suggests that the time-delay indication comprises the period of time that the information packet was stored in the router (Kim: col. 5, lines 26-50).

Regarding claim 35, Applicant teaches, as prior art, a wireless communication system 17. that facilitates full duplex transmission of information, the wireless communication system comprising: a transcoder that converts information signals received from at least one wireline communication device into encoded information packets compatible with a time-based wireless transmission protocol and communicates the encoded information packets at respective transcoder transmission times (page 1, line 16-page 4, line 12); a base transceiver site that transmits the encoded information packets to at least one wireless communication device at respective base transceiver site transmission times in accordance with the time-based wireless transmission protocol (page 1, line 16-page 4, line 12); and a router, operably coupled between the transcoder and the base transceiver site, that receives each encoded information packet from the transcoder and communicates each encoded information packet to the base transceiver site (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art that the router communicates each encoded information packet in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to each encoded information packet. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, having a router communicate each encoded information packet in accordance with a

Art Unit: 2665

priority scheme, wherein the priority scheme is based on a status of synchronization between two other devices (delay time) in order to ensure that the packet is received by the base transceiver site within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the router communicate each encoded information packet in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to each encoded information packet in order to ensure that the packet is received by the base transceiver site within a particular time.

18. Regarding claim 36, Applicant teaches, as prior art, a wireless communication system that facilitates full duplex transmission of information between wireline communication devices and wireless communication devices, the wireless communication system comprising: a transcoder that converts information signals received from at least one wireline communication device into encoded information packets compatible with a time-based wireless transmission protocol (page 1, line 16-page 4, line 12) and communicates the encoded information packets at respective transcoder transmission times (page 1, line 16-page 4, line 12); a router, operably coupled to the transcoder, that receives each encoded information packet from the transcoder (page 1, line 16-page 4, line 12), communicates a particular encoded information packet of a communication between a first wireline communication device and a first wireless communication device (page 1, line 16-page 4, line 12), stores the particular encoded information packet of the communication for a period of time to produce a stored information packet (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art that the transcoder assigns a priority to each encoded information packet based on a status of

Art Unit: 2665

synchronization of transcoder transmission time and base transceiver site transmission time with respect to each encoded information packet and a router, operably coupled to the transcoder, that receives each encoded information packet from the transcoder, determines the priority of each encoded information packet, communicates a particular encoded information packet of a communication between a first wireline communication device and a first wireless communication device when the priority of the particular encoded information packet indicates that the transcoder transmission time is substantially in synchronization with the base transceiver site transmission time with respect to the particular encoded information packet, stores the particular encoded information packet of the communication for a period of time to produce a stored information packet when the priority of the particular encoded information packet indicates that the transcoder transmission time is not in synchronization with the base transceiver site transmission time with respect to the particular encoded information packet, inserts a time-delay indication into a portion of the stored information packet to indicate the period of time that the stored information packet was stored in the router, and communicates the stored information packet including the time-delay indication upon expiration of the period of time. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, having a transmitting node assigns a priority to each encoded information packet based on a status of synchronization between two devices (delay) (col. 5, lines 26-50 and col. 6, lines 15-22) and having a router, operably coupled to the transmitting node, that receives each encoded information packet from the transmitting node (col. 5, lines 26-50 and col. 6, lines 15-

Art Unit: 2665

22), determines the priority of each encoded information packet (col. 5, lines 26-50 and col. 6, lines 15-22), communicates a particular encoded information packet of a communication between a communication device and another communication device when the priority of the particular encoded information packet indicates that the transmitting node transmission time is substantially in synchronization with the receiving node transmission time with respect to the particular encoded information packet (col. 5, lines 26-50 and col. 6, lines 15-22), stores the particular encoded information packet of the communication for a period of time to produce a stored information packet when the priority of the particular encoded information packet indicates that the transmitting node transmission time is not in synchronization with the receiving node transmission time with respect to the particular encoded information packet (col. 5, lines 26-50 and col. 6, lines 15-22), inserts a time-delay indication into a portion of the stored information packet to indicate the period of time that the stored information packet was stored in the router (col. 5, lines 26-50 and col. 6, lines 15-22), and communicates the stored information packet including the time-delay indication upon expiration of the period of time in order to ensure that the packet is received by the base transceiver site within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the transcoder assign a priority to each encoded information packet based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to each encoded information packet and a router, operably coupled to the transcoder, that receives each encoded information packet from the transcoder, determines the priority of each encoded information packet, communicates a particular encoded information packet of a communication between a first wireline communication device and a

Art Unit: 2665

il/Control Number. 03/0/8,7

first wireless communication device when the priority of the particular encoded information packet indicates that the transcoder transmission time is substantially in synchronization with the base transceiver site transmission time with respect to the particular encoded information packet, stores the particular encoded information packet of the communication for a period of time to produce a stored information packet when the priority of the particular encoded information packet indicates that the transcoder transmission time is not in synchronization with the base transceiver site transmission time with respect to the particular encoded information packet, inserts a time-delay indication into a portion of the stored information packet to indicate the period of time that the stored information packet was stored in the router, and communicates the stored information packet including the time-delay indication upon expiration of the period of time in order to ensure that the packet is received by the base transceiver site within a particular time.

19. Regarding claim 37, Applicant teaches, as prior art, a base site controller for use in a wireless communication system that facilitates full duplex transmission of information, the base site controller comprising: a transcoder that converts information signals received from wireline communication devices into encoded information packets compatible with a time-based wireless transmission protocol and communicates the encoded information packets at respective transcoder transmission times (page 1, line 16-page 4, line 12); and a router, operably coupled to the transcoder, that receives each encoded information packet from the transcoder and communicates each encoded information packet to a base transceiver site (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art that the router communicates each encoded information packet in accordance with a priority scheme, wherein the priority scheme is

Art Unit: 2665

based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to each encoded information packet. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, having the router communicate each encoded information packet in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization between two devices (delay) in order to ensure that the packet is received by the base transceiver site within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the router communicate each encoded information packet in accordance with a priority scheme, wherein the priority scheme is based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to each encoded information packet in order to ensure that the packet is received by the base transceiver site within a particular time.

- Claims 12-14, 16-22, 26, 29, 30, 33, and 34 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Kim (USPN 6,215,791) in further view of Waclawsky (USPN 6,449,255).
- Regarding claim 12, referring to claim 11, Applicant's admitted prior art in view of Kim discloses that the information packet forms part of a first communication (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22). Applicant's admitted prior art in view of Kim does not expressly disclose prior to the step of determining a priority: receiving an indication of a desired transcoder transmission time for the information packet, the

Art Unit: 2665

indication of the desired transcoder transmission time being based on a period of time that at least one prior information packet of the first communication was stored in the router; and determining the desired transcoder transmission time of the information packet based on the indication of the desired transcoder transmission time; and wherein the step of communicating comprises the step of communicating the information packet to the router at the desired transcoder transmission time. However, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet, but Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col. 5, lines 26-50). Waclawsky teaches, in a packet communication system, receiving an indication of a desired transmission time for the information packet; and determining the desired transmission time of the information packet based on the indication of the desired transmission time; and communicating the information packet at the desired transcoder transmission time in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention to receive an indication of a desired transmission time for the information packet; and to determine the desired transmission time of the information packet based on the indication of the desired transmission time; and to communicate the information packet at the desired transcoder transmission time in order to allow a system to automatically adapt to changing network conditions. Thus, Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests prior to the step of determining a Art Unit: 2665

priority: receiving an indication of a desired transcoder transmission time for the information packet, the indication of the desired transcoder transmission time being based on a period of time that at least one prior information packet of the first communication was stored in the router, where the time the packet was stored in the router will influence the delay time of the packet through the network and thus when the transcoder should transmit the packet; and determining the desired transcoder transmission time of the information packet based on the indication of the desired transcoder transmission time; and wherein the step of communicating comprises the step of communicating the information packet to the router at the desired transcoder transmission time.

- 22. Regarding claim 13, referring to claim 12, Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests prior to the step of determining a priority: determining the status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the information packet based on the indication of the desired transcoder transmission time (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60).
- Regarding claim 14, referring to claim 12, Applicant's admitted prior art in view of Kim 23. in further view of Waclawsky discloses that the information packet comprises an audio packet and wherein the step of communicating the information packet to the router at the desired transcoder transmission time results in reduced audio delay of the information packet (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60).
- Regarding claim 16, referring to claim 12, Applicant's admitted prior art in view of Kim 24. in further view of Waclawsky does not expressly disclose that the indication of the desired

Art Unit: 2665

transcoder transmission time comprises a timing offset from a transcoder transmission time of a prior information packet of the at least one prior information packet of the first communication; however, Applicant's admitted prior art in view of Kim in further view of Waclawsky discloses transmitting a transcoder transmission time (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60). Examiner takes official notice that it is well known it the art to communicate timing information through the use of offsets. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the indication of the desired transcoder transmission time comprise a timing offset from a transcoder transmission time of a prior information packet of the at least one prior information packet of the first communication since timing offsets are very well known.

25. Regarding claim 17, referring to claim 16, Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests that the step of determining a priority of an information packet comprises the steps of: when the timing offset is equal to zero, determining that the transcoder transmission time is synchronized with the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60); when the timing offset is not equal to zero, determining that the transcoder and the base transceiver site are presently synchronizing the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60); and determining the priority of the information packet as being higher when the transcoder transmission time is synchronized with the base transceiver site transmission time than when the transcoder and the base transceiver site are

Art Unit: 2665

presently synchronizing (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60).

Regarding claim 18, referring to claim 11, Applicant's admitted prior art in view of Kim 26. discloses that the information packet forms part of a first communication (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50 and col. 6, lines 15-22). Applicant's admitted prior art in view of Kim does not expressly disclose determining whether an indication of a desired transcoder transmission time had been received within a predetermined period of time after conveyance of a prior information packet of the first communication; and when the indication of the desired transcoder transmission time had not been received within the predetermined period of time, determining that the information packet is of highest priority. However, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet, but Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col. 5, lines 26-50). Waclawsky teaches, in a packet communication system, determining whether an indication of a desired transcoder transmission time had been received within a predetermined period of time after conveyance of a prior information packet of the first communication in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention to determine whether an indication of a desired transcoder transmission time had been received within a predetermined period of time

Art Unit: 2665

after conveyance of a prior information packet of the first communication in order to allow a system to automatically adapt to changing network conditions. Thus, Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests determining whether an indication of a desired transcoder transmission time had been received within a predetermined period of time after conveyance of a prior information packet of the first communication; and when the indication of the desired transcoder transmission time had not been received within the predetermined period of time, determining that the information packet is of highest priority in order to ensure that every packet arrives within the desired time.

Regarding claim 19, Applicant teaches, as prior art, in a time division multiple access wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16-page 4, line 12), a method for the base transceiver site to assist in improving signal quality of transmitted information as perceived by a user of a wireless communication device, the method comprising the steps of: receiving an information packet from the router (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art receiving an information packet from the router, the information packet including a time-delay indication, the time-delay indication corresponding to a period of time that the information packet was stored in the router; determining a desired transcoder transmission time of a subsequent information packet based at least on the time-delay indication and a desired base transceiver site transmission time; and

Art Unit: 2665

communicating an indication of the desired transcoder transmission time to the transcoder. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, receiving an information packet, the information packet including a time-delay indication (col. 5, lines 26-50 and col. 6, lines 15-22), the time-delay indication corresponding to a period of time that the information packet was stored in a router in order to ensure that the packet is received by a device within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to receive an information packet, the information packet including a time-delay indication, the time-delay indication corresponding to a period of time that the information packet was stored in the router in order to ensure that the packet is received by the base transceiver site within a particular time. Applicant's admitted prior art in view of Kim suggests determining a desired transcoder transmission time of a subsequent information packet based at least on the time-delay indication and a desired base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12) where the delay times are used to synchronize the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12). Applicant's admitted prior art in view of Kim does not expressly disclose communicating an indication of the desired transcoder transmission time to the transcoder; however, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet although Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col. 5, lines 26-50). Waclawsky teaches, in a

Art Unit: 2665

packet communication system, communicating an indication of the desired transmission time in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention to communicate an indication of the desired transcoder transmission time in order to allow a system to automatically adapt to changing network conditions.

- Regarding claim 20, referring to claim 19, Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests receiving the subsequent information packet within a predetermined time period before the desired base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60).
- 29. Regarding claim 21, referring to claim 20, Applicant's admitted prior art in view of Kim in further view of Waclawsky does not expressly disclose that the desired base transceiver site transmission time comprises commencement of a first time slot and wherein the predetermined period of time comprises a time span of a second time slot immediately preceding the first time slot; however, Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests that there is a predetermined period of time. It is generally considered to be within the ordinary skill in the art to adjust, vary, select, or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi
 Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108,

Art Unit: 2665

65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1055); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Applicant's admitted prior art in view of Kim in further view of Waclawsky suggests a predetermined period of time, any period of time, including one time slot preceding the transmission slot, would have been obvious absent a showing of criticality by Applicant.

- 30. Regarding claim 22, referring to claim 19, Applicant's admitted prior art in view of Kim in further view of Waclawsky discloses that the time-delay indication comprises the period of time that the information packet was stored in the router (Kim: col. 5, lines 26-50).
- 31. Regarding claim 26, referring to claim 25, Applicant's admitted prior art in view of Kim does not expressly disclose receiving an indication of a desired transcoder transmission time from the base transceiver site, the indication of the desired transcoder transmission time being based at least partly on a time-delay indication of at least one prior information packet; and communicating the indication of the desired transcoder transmission time to the transcoder; however, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet although Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col. 5, lines 26-50). Waclawsky teaches, in a packet communication system, communicating an indication of the desired transmission time in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It

Art Unit: 2665

would have been obvious to one of ordinary skill in the art at the time of the invention to receive an indication of a desired transcoder transmission time from the base transceiver site, the indication of the desired transcoder transmission time being based at least partly on a time-delay indication of at least one prior information packet; and to communicate the indication of the desired transcoder transmission time to the transcoder in order to allow a system to automatically adapt to changing network conditions.

Regarding claim 29, Applicant teaches, as prior art, in a time division multiple access 32. wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16page 4, line 12), a method for the transcoder to assist in improving signal quality of information transmitted by the base transceiver site as perceived by a user of a wireless communication device, the method comprising the steps of: communicating a first group of information packets to the router, the first group of information packets forming part of a first communication (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art prior to communicating an additional information packet of the first communication to the router, receiving an indication of a desired transcoder transmission time for the additional information packet, the indication being based on a period of time that the at least one information packet of the first group of information packets was stored in the router; determining the desired transcoder transmission time of the additional information packet based on the indication of the desired

Art Unit: 2665

transcoder transmission time; and communicating the additional information packet to the router at the desired transcoder transmission time. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, receiving an information packet at a receiver, the information packet including a time-delay indication (col. 5, lines 26-50 and col. 6, lines 15-22), the time-delay indication corresponding to a period of time that the information packet was stored in the router in order to ensure that the packet is received by the base transceiver site within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to receive an information packet at a receiver, the information packet including a time-delay indication, the time-delay indication corresponding to a period of time that the information packet was stored in the router in order to ensure that the packet is received by the base transceiver site within a particular time. Applicant's admitted prior art in view of Kim suggests determining a desired transcoder transmission time of a subsequent information packet based at least on the time-delay indication and a desired base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12) where the delay times are used to synchronize the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12). Applicant's admitted prior art in view of Kim does not expressly disclose prior to communicating an additional information packet of the first communication to the router, receiving an indication of a desired transcoder transmission time for the additional information packet, the indication being based on a period of time that the at least one information packet of

Art Unit: 2665

the first group of information packets was stored in the router; determining the desired transcoder transmission time of the additional information packet based on the indication of the desired transcoder transmission time; and communicating the additional information packet to the router at the desired transcoder transmission time; however, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet although Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col. 5, lines 26-50). Waclawsky teaches, in a packet communication system, communicating an indication of the desired transmission time in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention prior to communicate an additional information packet of the first communication to the router, to receive an indication of a desired transcoder transmission time for the additional information packet, the indication being based on a period of time that the at least one information packet of the first group of information packets was stored in the router; to determine the desired transcoder transmission time of the additional information packet based on the indication of the desired transcoder transmission time; and to communicate the additional information packet to the router at the desired transcoder transmission time in order to allow a system to automatically adapt to changing network conditions.

Art Unit: 2665

- 33. Regarding claim 30, referring to claim 29, Applicant's admitted prior art in view of Kim in further view of Waclawsky does not expressly disclose that the indication of the desired transcoder transmission time comprises a timing offset from a transcoder transmission time of an information packet of the first group of information packets; however, Applicant's admitted prior art in view of Kim in further view of Waclawsky discloses transmitting a transcoder transmission time (Applicant: page 1, line 16-page 4, line 12; Kim: col. 5, lines 26-50; and Waclawsky: col. 3, lines 35-60). Examiner takes official notice that it is well known it the art to communicate timing information through the use of offsets. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the indication of the desired transcoder transmission time comprise a timing offset from a transcoder transmission time of a prior information packet of the at least one prior packet of the first communication since timing offsets are well known.
- Regarding claim 33, Applicant teaches, as prior art, in a time division multiple access 34. wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16page 4, line 12), a method for improving signal quality of information transmitted by the base transceiver site as perceived by a user of a wireless communication device, the method comprising the steps of communicating, by the transcoder, the first information packet to the router (page 1, line 16-page 4, line 12); communicating, by the router, the first information packet to the base transceiver site (page 1, line 16-page 4, line 12); storing, by the router, the first

Art Unit: 2665

information packet for a period of time (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art determining, by the transcoder, a priority of a first information packet of a communication based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the first information packet; including, by the transcoder, an indication of the priority in a portion of the first information packet; communicating, by the transcoder, the first information packet to the router; determining, by the router, the priority of the first information packet; when the priority indicates that the transcoder transmission time is substantially in synchronization with the base transceiver site transmission time, communicating, by the router, the first information packet to the base transceiver site; when the priority indicates that the transcoder and the base transceiver site are presently synchronizing the transcoder transmission time and the base transceiver site transmission time: storing, by the router, the first information packet for a period of time; inserting, by the router, a time-delay indication into a portion of the first information packet, the time-delay indication corresponding to the period of time that the first information packet was stored in the router; communicating, by the router, the first information packet including the time-delay indication to the base transceiver site; determining, by the base transceiver site, a desired transcoder transmission time of a subsequent information packet of the communication based at least on the time-delay indication and a desired base transceiver site transmission time; and communicating, by the base transceiver site, an indication of the desired transcoder transmission time to the transcoder. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the

Art Unit: 2665

transmission time of a packet, determining, by a transmitting node, a priority of a first information packet of a communication based on a status of synchronization between two other devices (delay time) (col. 5, lines 26-50 and col. 6, lines 15-22); including, by the transmitting node, an indication of the priority in a portion of the first information packet (col. 5, lines 26-50 and col. 6, lines 15-22); communicating, by the transmitting node, the first information packet to the router (col. 5, lines 26-50 and col. 6, lines 15-22); determining, by the router, the priority of the first information packet (col. 5, lines 26-50 and col. 6, lines 15-22); when the priority indicates that the transmitting node transmission time is substantially in synchronization with the base transceiver site transmission time, communicating, by the router, the first information packet to the receiving node (col. 5, lines 26-50 and col. 6, lines 15-22); when the priority indicates that the transmitting node and the receiving node are presently synchronizing: storing, by the router, the first information packet for a period of time (col. 5, lines 26-50 and col. 6, lines 15-22); inserting, by the router, a time-delay indication into a portion of the first information packet, the time-delay indication corresponding to the period of time that the first information packet was stored in the router (col. 5, lines 26-50 and col. 6, lines 15-22); communicating, by the router, the first information packet including the time-delay indication to the receiving node in order to ensure that the packet is received by the base transceiver site within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to determine, by the transcoder, a priority of a first information packet of a communication based on a status of synchronization of transcoder transmission time and base transceiver site transmission time with respect to the first information packet; to include, by the transcoder, an indication of the priority in a portion of the first

Art Unit: 2665

information packet; to communicate, by the transcoder, the first information packet to the router; to determine, by the router, the priority of the first information packet; when the priority indicates that the transcoder transmission time is substantially in synchronization with the base transceiver site transmission time, to communicate, by the router, the first information packet to the base transceiver site; when the priority indicates that the transcoder and the base transceiver site are presently synchronizing the transcoder transmission time and the base transceiver site transmission time: to store, by the router, the first information packet for a period of time; to insert, by the router, a time-delay indication into a portion of the first information packet, the time-delay indication corresponding to the period of time that the first information packet was stored in the router; to communicate, by the router, the first information packet including the time-delay indication to the base transceiver site in order to ensure that the packet is received by the base transceiver site within a particular time. Applicant's admitted prior art in view of Kim suggests determining, by the base transceiver site, a desired transcoder transmission time of a subsequent information packet of the communication based at least on the time-delay indication and a desired base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50) where the delay times are used to synchronize the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16page 4, line 12). Applicant's admitted prior art in view of Kim does not expressly disclose communicating, by the base transceiver site, an indication of the desired transcoder transmission time to the transcoder; however, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet although Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col.

Art Unit: 2665

5, lines 26-50). Waclawsky teaches, in a packet communication system, communicating an indication of the desired transmission time in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention prior to communicating, by the base transceiver site, an indication of the desired transcoder transmission time to the transcoder in order to allow a system to automatically adapt to changing network conditions.

Regarding claim 34, Applicant teaches, as prior art, in a time division multiple access wireless communication system that facilitates full duplex transmission of information, the wireless communication system including at least a transcoder, a base transceiver site and a router, the router being operably coupled between the transcoder and the base transceiver site and supporting a non-deterministic packetized transport for communicating information between the transcoder and the base transceiver site as a plurality of information packets (page 1, line 16-page 4, line 12), a method for synchronizing transcoder transmission time to base transceiver site transmission time to mitigate signal quality degradation due to variable delays introduced by the router and thereby improve signal quality of information transmitted by the base transceiver site as perceived by a user of a wireless communication device, the method comprising the steps of: receiving, by the router, an information packet of a communication from the transcoder (page 1, line 16-page 4, line 12); storing, by the router, the information packet for a period of time (page 1, line 16-page 4, line 12). Applicant does not expressly disclose as prior art inserting, by the

router, a time-delay indication into a portion of the information packet, the time-delay indication corresponding to the period of time that the information packet was stored in the router; communicating, by the router, the information packet including the time-delay indication to the base transceiver site; determining, by the base transceiver site, a desired transcoder transmission time of a subsequent information packet of the communication based at least on the tinge-delay indication and a desired base transceiver site transmission time; and communicating, by the base transceiver site, an indication of the desired transcoder transmission time to the transcoder. However, Applicant does disclose as prior art transmitting packets based upon delays where the delays are based on a status of synchronization of the transcoder transmission time and the base transceiver site transmission time. Kim teaches, in a system for controlling the transmission time of a packet, inserting, by the router, a time-delay indication into a portion of the information packet, the time-delay indication corresponding to the period of time that the information packet was stored in the router (col. 5, lines 26-50 and col. 6, lines 15-22); communicating, by the router, the information packet including the time-delay indication to the base transceiver site in order to ensure that the packet is received by the receiving node within a particular time (col. 5, lines 26-50 and col. 6, lines 15-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to insert, by the router, a time-delay indication into a portion of the information packet, the time-delay indication corresponding to the period of time that the information packet was stored in the router and to communicate, by the router, the information packet including the time-delay indication to the base transceiver site in order to ensure that the packet is received by the base transceiver site within a particular time. Applicant's admitted prior art in view of Kim suggests determining, by the base transceiver site, a desired transcoder

Art Unit: 2665

transmission time of a subsequent information packet of the communication based at least on the time-delay indication and a desired base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12 and Kim: col. 5, lines 26-50) where the delay times are used to synchronize the transcoder transmission time and the base transceiver site transmission time (Applicant: page 1, line 16-page 4, line 12). Applicant's admitted prior art in view of Kim does not expressly disclose communicating, by the base transceiver site, an indication of the desired transcoder transmission time to the transcoder; however, Applicant's admitted prior art in view of Kim does disclose that a end-to-end delay bound is determined for the packet although Applicant's admitted prior art in view of Kim does not disclose how this delay bound is determined or communicated (Kim: col. 5, lines 26-50). Waclawsky teaches, in a packet communication system, communicating an indication of the desired transmission time in order to allow a system to automatically adapt to changing network conditions (col. 3, lines 35-60; col. 4, lines 41-50; and col. 16, line 65-col. 17, line 16) where the use of a wireless link to transmit the feedback signal and the teaching that the monitor can be an external device suggests that the monitoring can be done in another device on the network. It would have been obvious to one of ordinary skill in the art at the time of the invention prior to communicating, by the base transceiver site, an indication of the desired transcoder transmission time to the transcoder in order to allow a system to automatically adapt to changing network conditions.

Allowable Subject Matter

36. Claims 5, 7, 23, 24, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or fairly suggest that the

Page 34

Application/Control Number: 09/678,716

Art Unit: 2665

time-delay indication is a quantity of packets that were communicated by the router to the BTS

during the period of time that the packet was stored in the router.

37. Claims 6, 15, 31 and 32 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims. The prior art does not disclose or fairly suggest that the

time-delay indication is the average period of time that the packets were stored in the router.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The

examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel J. Ryman Examiner

Art Unit 2665

MR

Daniel J. Ryman

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600